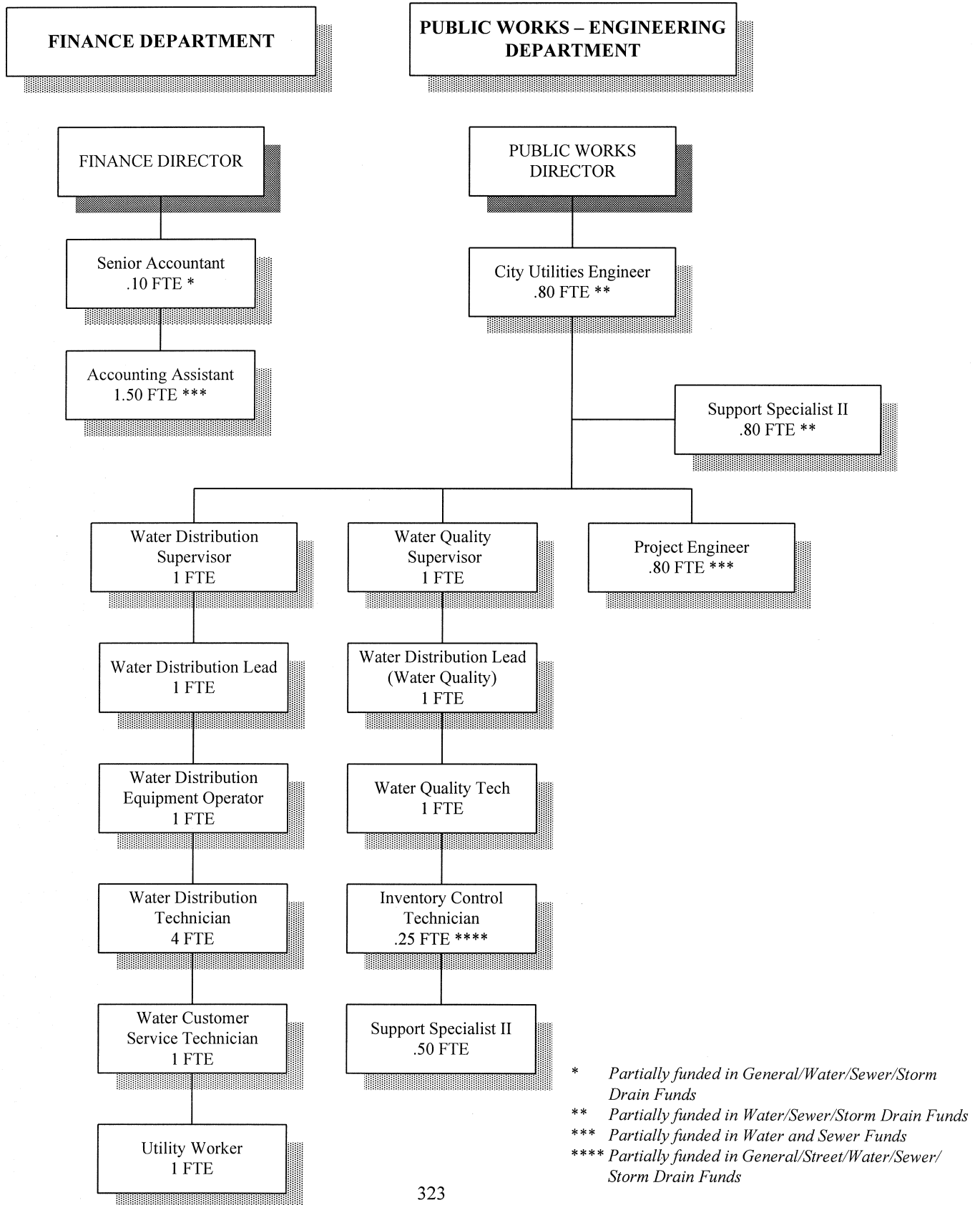


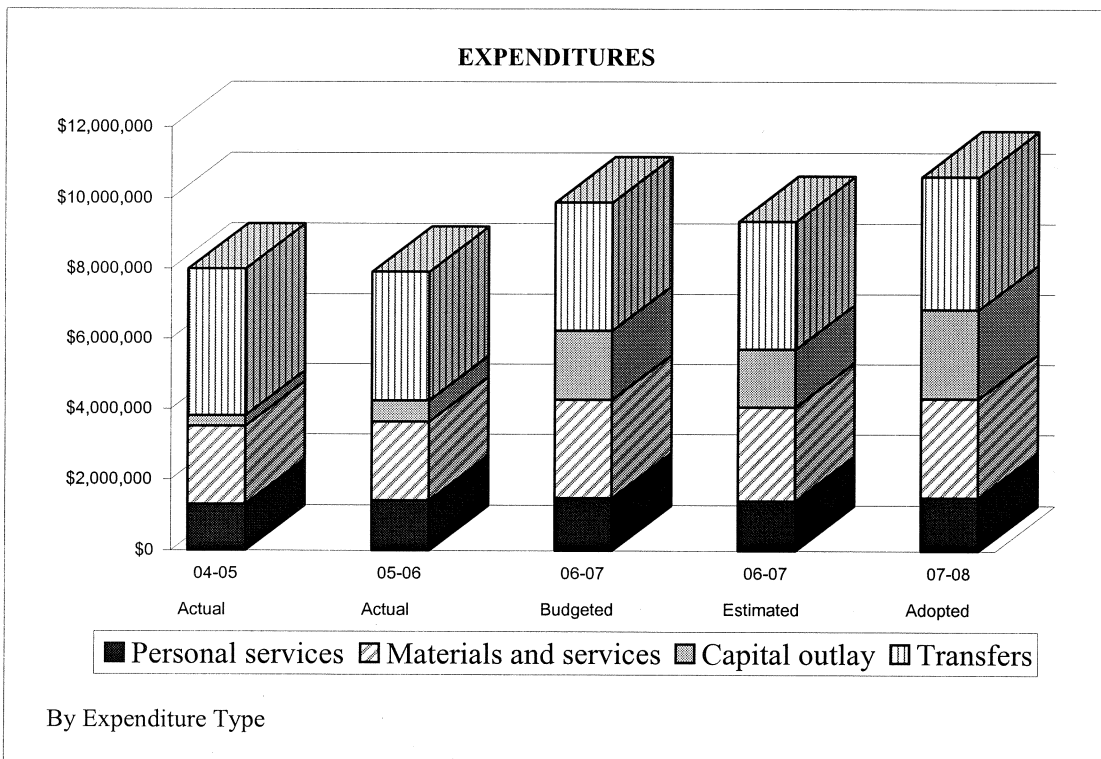
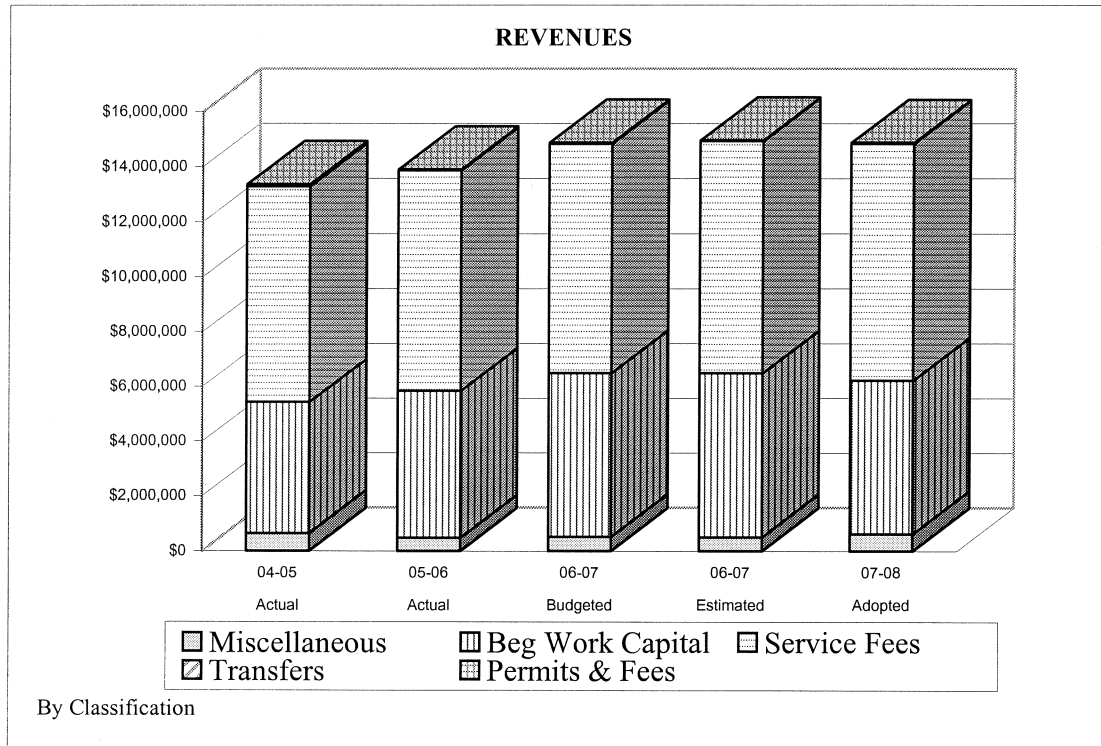
Water Fund

FY 2007-08 BUDGETED POSITIONS



WATER FUND

ADOPTED FY 2007-08



CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET

**WATER FUND (MAJOR FUND)
SUMMARY OF REVENUES AND EXPENDITURES
AND OTHER FINANCING SOURCES & USES**

	FY 2004-05 Actual	FY 2005-06 Actual	FY 2006-07 Budgeted	FY 2006-07 Estimated	FY 2007-08 Adopted
Revenues:					
Interest on investments	\$139,083	\$253,817	\$320,000	\$318,750	\$350,000
Intergovernmental revenue	208,287	154,426	145,000	125,000	225,000
Charges for services	7,907,221	8,052,007	8,384,109	8,469,708	8,646,365
Project engineering charges	13,559	23,861	0	15,000	0
Miscellaneous	281,192	42,509	41,228	41,228	41,228
Sub Total Revenues	<u>\$8,549,342</u>	<u>\$8,526,619</u>	<u>\$8,890,337</u>	<u>\$8,969,686</u>	<u>\$9,262,593</u>
Expenditures:					
Personal services	\$1,297,876	\$1,410,898	\$1,481,045	\$1,396,582	\$1,501,870
Materials & services	2,205,175	2,219,264	2,780,183	2,660,373	2,798,295
Capital outlay	305,932	601,779	1,972,162	1,644,162	2,545,800
Sub Total Expenditures	<u>\$3,808,983</u>	<u>\$4,231,940</u>	<u>\$6,233,390</u>	<u>\$5,701,117</u>	<u>\$6,845,965</u>
Revenues Over/Under Expenditures	\$4,740,359	\$4,294,679	\$2,656,947	\$3,268,569	\$2,416,628
Other financing sources (uses):					
Transfers in	\$15,407	\$0	\$0	\$0	\$0
Transfers out	<u>(4,181,852)</u>	<u>(3,679,153)</u>	<u>(3,644,716)</u>	<u>(3,644,716)</u>	<u>(3,762,264)</u>
Total Other Financing Sources (Uses):	<u>(4,166,445)</u>	<u>(3,679,153)</u>	<u>(3,644,716)</u>	<u>(3,644,716)</u>	<u>(3,762,264)</u>
Net Change in Fund Balance	\$573,915	\$615,526	(\$987,769)	(\$376,147)	(\$1,345,636)
Fund Balance/Working Capital Beginning of Year	<u>4,788,971</u>	<u>5,362,886</u>	<u>5,978,412</u>	<u>5,978,412</u>	<u>5,602,265</u>
Fund Balance (Contingency)/Working Capital End of Year	<u>\$5,362,886</u>	<u>\$5,978,412</u>	<u>\$4,990,643</u>	<u>\$5,602,265</u>	<u>\$4,256,629</u>

Contingency for FY 2007-08 adopted budget is available for appropriation upon the City Council's approval. The contingency target is to retain a minimum 16% of expenditures in contingency for continuing operations equaling \$1,095,354, \$500,000 for catastrophic loss reserve for the Joint Water Commission's operating plant, \$600,000 in a water revenue stabilization account, and \$100,000 for equipment replacement.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
	DEPARTMENT HEAD: GARY BRENTANO

MISSION STATEMENT:

To provide potable water to the City within the mandates of the State of Oregon Department of Human Services and Federal Environmental Protection Agency that is of sufficient quality, quantity, and pressure to meet all of the applicable rules criteria. *(Council Goal #1: Preserve and enhance our sense of community; #2: Use City resources efficiently to ensure long-term financial stability; #3: Continue to plan for, improve and maintain the City's infrastructure; #4: Provide responsive, cost-effective service to the community; #5: Assure a safe and healthy community; #7: Maintain Beaverton as a regional leader in cooperative efforts with other agencies and organizations; #8: Provide and support a highly qualified and motivated City work force.)*

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION	17.25	18.20	17.15	16.75	16.75
PERSONAL SERVICES	\$1,297,876	\$1,410,899	\$1,481,045	\$1,501,870	\$1,501,870
MATERIALS & SERVICES	2,205,179	2,219,266	2,780,183	2,798,295	2,798,295
CAPITAL OUTLAY	305,933	601,779	1,972,162	2,545,800	2,545,800
TRANSFERS	4,181,850	3,679,154	3,644,716	3,762,264	3,762,264
CONTINGENCY	0	0	4,990,643	4,256,629	4,256,629
TOTAL	\$7,990,838	\$7,911,098	\$14,868,749	\$14,864,858	\$14,864,858

Funding Sources:	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2007-08
Beginning Working Capital	\$4,788,971	\$5,362,886	\$5,978,412	\$5,602,265	\$5,602,265
Intergovernmental Revenue	208,287	154,426	145,000	225,000	225,000
Permits & Fees	58,447	32,610	35,000	30,000	30,000
Water Service Fees	7,848,773	8,019,397	8,349,109	8,616,365	8,616,365
Miscellaneous Revenues	433,834	320,187	361,228	391,228	391,228
Transfer from Insurance Fund	15,407	0	0	0	0

Water Projects:

3611 Joint Water Commission Project	\$0	\$7,848	\$356,394	\$878,500	\$878,500
3700 Maint. & Replacement Program	54,402	24,199	100,000	60,000	60,000
3701 Water System Improvements	203,685	552,208	1,459,000	1,425,000	1,425,000
3705 Fire Hydrant Replacement Program	7,837	782	21,000	84,800	84,800

	FY 2003-04 Actual	FY 2004-05 Actual	FY 2005-06 Budgeted	FY 2006-07 Adopted
Water Fund Budget Cost Per Capita (less contingency)	\$100.70	\$95.20	\$117.22	\$124.66
Water Fund Budget as Percent of City's Total Budget (less contingencies and capital projects)	9.909%	7.578%	6.153%	5.878%

**CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES**

FUND: 501 WATER	DEPARTMENT: FINANCE
PROGRAM: 0545 UTILITY BILLING	PROGRAM MANAGER: SHIRLEY KELLY/SUE ANN KONIAK

Program Goal:

To maintain the financial stability for the operation and maintenance of City's water system by providing citizens with timely and accurate utility bills and the subsequent collection and deposit of these charges. *(Council Goal #2: Use City resources efficiently to ensure long-term financial stability; #4: Provide responsive, cost-effective service to the community.)*

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION	1.60	1.60	1.60	1.60	1.60
PERSONAL SERVICES	\$90,562	\$94,598	\$103,820	\$107,236	\$107,236
MATERIALS & SERVICES	42,378	43,600	47,060	49,285	49,285
CAPITAL OUTLAY	0	0	0	0	0
TRANSFERS	9,905	9,978	13,407	15,995	15,995
TOTAL	\$142,845	\$148,176	\$164,287	\$172,516	\$172,516

Program Objective (services provided):

- Coordinate meter reading and generate a timely bill to customers for water usage, water meter and water line service.
- Post payments of water charges to the appropriate customer account(s).
- Provide citizens with outstanding customer service for the following functions:
 - Information regarding their water account(s)
 - Establishing and closing customer accounts
 - Assistance with payment arrangements, delinquent charges, leak adjustments, scheduling turn-on and discontinuance of water services
- Update and maintain customer records.
- Implement City Code with respect to water service regulations.
- Perform prudent and timely collection practices to maintain a low delinquency and non-payment rate.
- Perform a monthly reconciliation between customer accounts and the general ledger.

Performance Measures:	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Number of accounts*	15,917 / 16,092	16,374 / 16,583	16,873 / 16,808	17,102
Number of accounts maintained per FTE *	3,979 / 4,023	4,094 / 4,146	4,218 / 4,202	4,276
Avg. Monthly Uncollectable Account Write Offs	\$780 / \$414	\$850 / \$962	\$715 / \$687	\$699
Percentage of Account Write Offs of Total Sales	.12% / .06%	.12% / .14%	.10% / .10%	.10%

*Note: This Performance Measure is based on the City Water accounts only. It does not include City of Beaverton citizens which are served water by Tualatin Valley Water District, West Slope Water District and Raleigh Water District.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: FINANCE
PROGRAM: 0545 UTILITY BILLING	PROGRAM MANAGER: SHIRLEY KELLY/SUE ANN KONIAK

Performance Outcomes:

The program continues to meet the increasing demand for utility billing services with existing resources.

The program's low percentage in account write offs, for the most part, is due to the fact that water service is discontinued for non-payment of an active account.

Program Trends, Needs and Performance:

This past fiscal year, the utility billing staff became responsible for additional duties as a result of staff changes and cross training. Some of those duties include: full responsibility for all aspects of billing from importing the meter reads electronically through electronic transmission of files to our vendor for printing, stuffing and mailing of the five monthly utility billing groups; importing electronically and committing lockbox payments; transmitting electronically files containing automatic customer payments (electronic funds transfer) taken directly out of the customer's checking account and posting those payments; and generating flat files through Access for past due notices, reminder past due notices and notification to owners of property where the tenant is past due and electronic transmission of those files to our vendor for printing and mailing. All of these changes have increased efficiency in the department, as well as, providing for essential back up.

During the next fiscal year, we are planning to upgrade our current utility billing software to a newer version that will be either SQL based or .NET based. This will allow for more functionality, as well as, the ability to make some data fixes and changes in-house.

**CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES**

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0740 ENTERPRISE MANAGEMENT & ADMIN.	PROGRAM MANAGER: DAVID WINSHIP

Program Goal:

The Water Enterprise Management and Administrative program provides engineering and policy expertise for management of City enterprise funds and water resources. The program participates in development of intergovernmental agreements and conducts long-term planning to ensure funding, perpetual replacement of public infrastructure and extra-capacity facilities necessary to serve growth. The program also works to protect the safety and integrity of the public water system from cross connections by enforcement of the Beaverton Code and Oregon Department of Human Services Administrative Rules, which require the installation, inspection, operation, maintenance, and annual testing of backflow devices.

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION	3.90	4.85	2.80	2.40	2.40
PERSONAL SERVICES	\$321,926	\$389,762	\$290,688	\$264,927	\$264,927
MATERIALS & SERVICES	72,983	81,209	111,715	104,848	104,848
CAPITAL OUTLAY	0	0	0	0	0
TRANSFERS	17,433	11,804	14,508	16,738	16,738
TOTAL	\$412,342	\$482,775	\$416,911	\$386,513	\$386,513

Program Objectives (services provided):

Primary administrative elements of this program:

- Supervise preparation of the FY 2007-08 Capital Improvements Plan (CIP)
- Supervise, coordinate, schedule, design, and manage construction of the water projects in the FY 2007-08 (CIP).
- Participate in committees of the Joint Water Commission and Regional Water Consortium and other programs.
- Produce and distribute annual Consumer Confidence (Water Quality) Report to all City water customers.
- Review Database and Mapping Maintenance for Water System.
- Administer annual testing program for privately-owned backflow assemblies and devices as required by DHS

This program provides expertise on water resource issues, design standards and cooperative agreements to the City's Community Development Department and other water agencies. Staff serves as City's representative to the Regional Water Providers Consortium, the Joint Water Commission (JWC), Barney (Reservoir) Joint Ownership Commission, and the Tualatin Basin Water Supply Project.

Performance Measures:	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Management and Administration				
Total water reservoir (non-groundwater storage) capacity within City limits (in million gallons)	28.25	28.25 / 28.25	28.25 / 28.25	28.25
City average daily water demand (City water only in million gallons)	9.0 / 8.28	9.0 / 7.84	8.75 / 8.56	8.75
Number of average demand days that can be supplied from in-City water storage reservoirs including ASR wells	4.9 / 5.4	9.4 / 5.8	10.3 / 11.0 *	10.3

* Reflects increased supply of 3 MGD from new ASR No. 4 groundwater well.

**CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES**

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0740 ENTERPRISE MANAGEMENT & ADMIN.	PROGRAM MANAGER: DAVID WINSHIP

Performance Measures (Continued):	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Water Cross Connection Inspection				
Annual testing of backflow assemblies:				
Total number of assemblies currently on record (active & inactive)	5,500 / 4,785	5,382 / 5,311	5,804 / 5,702	6,000
Number of backflow assemblies tested	4,200 / 4,745	5,220 / 5,210	5,703 / 5,325	5,400
Total backflow assemblies passing test within State required period	90% / 99.1%	97% / 98%	98% / 96.8%	98%
Total number of new and replaced assemblies	800 / 277	825 / 576	550 / 472	550
Total active existing backflow assemblies	5,200 / 4,786	5,382 / 5,297	5,804 / 5,664	5,900

Performance Outcomes:

The City's primary water supply comes from the Tualatin and Trask Rivers. Since ASR (Aquifer Storage and Recover) has become a part of the water supply system, Beaverton's water during the summer represents a mixture of water from ASR and current sources (Trask and Tualatin rivers). Total groundwater (stored ASR plus native groundwater) extracted from the City's two ASR wells now make-up greater than 9 percent of the total annual drinking water distributed to customers.

The City's fluoridation system has operated since mid-May 2004. The City's water is fluoridated at a target level of 0.9 parts per million (ppm) for the purpose of improving dental health for consumers of Beaverton's water.

Program Trends, Needs and Performance:

Water Source Projects for the Future

Water resources agencies in Washington County are acting now to ensure clean, safe and reliable water supplies for the environment and needs of a growing community. They have formed a water supply partnership to finance and plan for future water supplies from the Tualatin River. The Tualatin Basin Water Supply Project partners include Clean Water Services, Tualatin Valley Water District (TVWD), the cities of Hillsboro, Forest Grove, Beaverton, Tigard, and Tualatin in partnership with the US Bureau of Reclamation (BoR).

During 2005, an alternatives analysis examined the various supply options and two were selected for further study in a 2006/2007 Environmental Impact Statement (EIS), out for public review and comment during FY 07-08. The first alternative is a 40-foot dam raise of Scoggins Dam (at Hagg Lake) with a large diameter raw water pipeline pumpback from the Tualatin River to refill Hagg Lake each year. The second alternative is a multiple source option that includes a 25-foot raise of Scoggins Dam with a large diameter raw water pipeline pumpback, and expansion of the Willamette River Water Treatment Plant located in Wilsonville. The City of Beaverton is a financial partner in the Tualatin Basin Water Supply Project with a share of 3.3 percent. During FY 07-08, the City will continue to evaluate its future water supply needs and more closely examine the proposed expansion of the Willamette River Treatment Plant as another potential future supply option.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0740 ENTERPRISE MANAGEMENT & ADMIN.	PROGRAM MANAGER: DAVID WINSHIP

The drinking water program will continue its efforts to trim peak water supply (peak hour and peak day) into the City so as not to exceed the City-owned capacity of 18.75 million gallons per day (mgd) in the Joint Water Commission water treatment plant. The City is using ASR as an alternative means to increase water supply capacity by up to 6 million gallons each day during summer 2007. The 3 mgd increased capacity will come from the completed ASR No. 4 facility. In 2006, a total of 299 million gallons was stored in two ASR wells with 281 million gallons recovered from the wells and pumped into the water distribution system. ASR technology enables the City to meet short-term water demand and may delay the need to purchase water, expand water treatment, and build aboveground storage reservoirs and new conveyance facilities. These factors represent potential large cost savings to the City.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0741 WATER SERVICES	DEPARTMENT HEAD: GARY BRENTANO

Program Goal:

This program only manages the amounts budgeted for payments to the City of Hillsboro Joint Utilities Commission (agent for the Joint Water Commission) for water purchased for resale and for professional services to provide contract water meter reading. Transfer budget is for General Fund overhead, Information Systems charges, and property and liability insurance.

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION					
PERSONAL SERVICES					
MATERIALS & SERVICES	\$1,477,643	\$1,417,950	\$1,695,237	\$1,754,807	\$1,754,807
CAPITAL OUTLAY	0	0	0	0	0
TRANSFERS	3,975,261	3,472,214	3,326,725	3,381,436	3,381,436
CONTINGENCY	0	0	4,990,643	4,256,629	4,256,629
TOTAL	\$5,452,904	\$4,890,164	\$10,012,605	\$9,392,872	\$9,392,872

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0742 WATER SYSTEM DISTRIBUTION	PROGRAM MANAGER: STEVE CURTIS

Program Goal:

To provide potable water of distinguished quality, quantity, and pressure for residential and commercial consumption, and fire protection at a reasonable cost through routine maintenance of our water infrastructure and by promoting cooperative agreements with other public agencies.

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION	0.00	0.00	0.00	9.00	9.00
PERSONAL SERVICES	\$0	\$0	\$0	\$780,852	\$780,852
MATERIALS & SERVICES	0	0	0	261,312	261,312
CAPITAL OUTLAY	0	0	0	12,500	12,500
TRANSFERS	0	0	0	0	0
TOTAL	\$0	\$0	\$0	\$1,054,664	\$1,054,664

Program Objective (services provided):

Due to the magnitude of the water system infrastructure and staff size to operate and maintain the system, two budget programs have now been designated (0742 and 0743) to better describe the revised staff structure and system operations. New Program 0742 covers all aspects related to the maintenance of the water distribution piping, mainline valves/fittings, fire hydrants, and customer water meters. Program 0743 continues to cover drinking water quality monitoring, testing and State reporting, and operation and maintenance of water supply infrastructure, such as storage reservoirs, pumping stations, fluoridation facilities, special control valves, pressure reducing stations, large transmission lines, and water system telemetry control.

Fire hydrant maintenance is a high priority to provide fire protection for our citizens' safety. We have an aggressive ongoing maintenance and replacement program in place. This budget proposes that nearly the entire total 2,325 City hydrants be inspected annually and have preventive maintenance performed to ensure proper operation. For FY 2007-08 an estimated 36 fire hydrants will be replaced as part of the annual hydrant replacement program by Water Division field staff.

Performance Measures:

FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
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Water Hydrant Replacement Program.

Replacement/upgrade of two port hydrants to three port systems.

36*

Installing Dead End Blow Offs.

Wherever possible, the water system that is not looped should have a blow off installed to move stagnant water.

24*

Water Leak Repairs. Repair of water mains, service lines and water meters. Implementing our leak detection program will conserve water and substantially decrease revenue loss.

600 / 400

550 / 310

400 / 336

480

* Indicates new objective

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0742 WATER SYSTEM DISTRIBUTION	PROGRAM MANAGER: STEVE CURTIS

Program Objective (services provided) (Continued):

	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Fire Hydrant Maintenance. Inspect and maintain all City-owned fire hydrants as per Oregon DHS Health Division OAR and recommendations of the American Water Works Association. Perform required repairs within 5 working days of a reported or discovered problem. (Total Fire Hydrants Maintained)	1,750 / 1,932	1,932 / 2,243	2,265 / 2,265	2,325
Water Meter Replacement Program. Annual replacement of approximately 48 meters, and 320 smaller meters. (Total Water Meters Maintained)	16,000 / 16,092	16,374 / 16,583	16,843 / 16,946	17,211

Performance Outcomes:

The Water Division's FY 2007-08 budget includes a leak detection and flow testing program. The leak detection program will reduce main breaks, identify water leakage for repair, and reduce unaccounted water loss. The flow testing program will identify inadequate pressure and help with modeling. Both of these programs will assist in planning future Capital Improvement Projects.

Replacement of old malfunctioning water meters is very important to accurately measure water consumed by customers and to maintain the Water Fund's revenue stream and reduce unaccounted water loss. A total of 48 large meters (1½-inch and larger) will be replaced and a total of 320 small meters (¾-inch and 1-inch) will be replaced. Currently we have 4,580 ¾-inch meters that are 20+ years old.

Services and Trends:

Valve exercising (opening and closing) and maintenance is another critical function. This function makes sure valves can be closed in the event of a main break or other interruptions in flow. Also, a section of water main can be isolated for repair or to perform preventative maintenance. A comprehensive program of inspection, exercise, and maintenance of valves on a regular basis helps avoid potentially serious problems when the need to operate a valve arises.

Water System Mapping / Inventory

The water system operation and maintenance field crews must have annually updated and accurate maps. Accurate maps and water system inventories prepared by this budget program are also used by Public Works staff to plan for the replacement and upgrades to the water system. Laptop computers loaded with automated mapping are currently carried in vehicles of field crews. Use of laptop computers and training of field staff to assist with other tasks will continue to expand in the future to improve efficiency and accuracy. The City has had a steady increase in total length of water mains and other water system infrastructure, such as water storage reservoirs, pump stations, pressure reducing valve stations, fluoridation facilities and three ASR groundwater wells. Ongoing water inventory and mapping reflects a more accurate inventory of City water system facilities.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0743 WATER SYSTEM QUALITY	PROGRAM MANAGER: RICK WEAVER

Program Goal:

To provide potable water of superior quality, quantity, and pressure for residential and commercial consumption, and fire protection at a reasonable cost through careful monitoring and maintenance of the city's water supply and storage systems and infrastructure.

REQUIREMENTS	FY 2004-05 ACTUAL	FY 2005-06 ACTUAL	FY 2006-07 BUDGETED	FY 2007-08 PROPOSED	FY 2007-08 ADOPTED
POSITION	11.75	11.75	12.75	3.75	3.75
PERSONAL SERVICES	\$885,388	\$926,539	\$1,086,537	\$348,855	\$348,855
MATERIALS & SERVICES	612,175	676,507	926,171	628,043	628,043
CAPITAL OUTLAY	40,009	16,742	35,768	85,000	85,000
TRANSFERS	179,251	185,158	290,076	348,095	348,095
TOTAL	\$1,716,823	\$1,804,946	\$2,338,552	\$1,409,993	\$1,409,993

Program Objective (services provided):

Due to the magnitude of the water system infrastructure and staff size to operate and maintain the system, two budget programs have now been designated (0742 and 0743) to better describe the revised staff structure and system operations. Program 0743 covers drinking water quality monitoring, testing and State reporting, plus operation and maintenance of water supply infrastructure, such as storage reservoirs, pumping stations, fluoridation facilities, special control valves, pressure reducing stations, large transmission lines, and water system telemetry control. Program 0742 covers all aspects related to the maintenance of the water distribution piping, mainline valves/fittings, fire hydrants, and customer water meters.

Water quality testing remains one of the highest priorities of the City's Water Division to provide outstanding drinking water and to maintain compliance with the rigorous standards of the Oregon Department of Human Services (DHS) and the Federal Environmental Protection Agency (EPA).

Performance Measures:

	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Water Quality Testing. Conduct tests to meet or exceed the water quality standards of the Oregon Department of Human Services (DHS) Health Division and the Federal Environmental Protection Agency (EPA).	1,441 / 1,450	1,501 / 1,649	1,877 / 1,905	1,825
Pump Operation & Maintenance. Operate, inspect, and maintain pumps in four water pumping stations and three Aquifer Storage Recovery groundwater wells in various locations throughout the City. Figure shown is for total number of pumps.	New Measure	New Measure	26	29
PRV Maintenance. Inspect each of 149 mainline pressure reducing valves (PRVs) every 6 months, and rebuild 20 percent per year. Also, maintain 444 ¾-inch diameter PRVs and rebuild as needed. Total pressure reducing valves to maintain is 593 (includes PRVs on water mains and City-installed residential PRVs).	139 / 139	139 / 144	144 / 147	149

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET
CURRENT LEVEL OF SERVICES

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 0743 WATER SYSTEM QUALITY	PROGRAM MANAGER: RICK WEAVER

Performance Measures:	FY 2004-05 Projected/Actual	FY 2005-06 Projected/Actual	FY 2006-07 Budgeted/Revised	FY 2007-08 Adopted
Average water samples tested per month	120 / 120	125 / 137	156 / 159	152
Number of pumps operated & maintained per month.	N/A	N/A	26	29
Inspect, repair and rebuild as needed each mainline PRV per month	12.6 / 12.6	12.6 / 12	12 / 12.3	12.4

Performance Outcomes:

Continued installation, inspection, maintenance, and replacement of City-owned existing pressure reducing valves are important tasks performed by this Program. The 98 City-owned backflow assemblies for municipal buildings and City landscape irrigation system must be tested annually according to the administrative rules of the Oregon Department of Human Services. The Water Quality group ensures that our certified backflow testers perform and report these tests.

Services and Trends:

Federal and State mandated drinking water quality regulations in the next five years are expected to continue to expand, and the monitoring and water main flushing standards will continue to be raised to reduce water "age" (the time water spends in the drinking water distribution system before consumption). It is expected that overall costs for water quality monitoring will grow due to the increased number of drinking water contaminants regulated by the US EPA. The new 2007 EPA regulations "Stage 2 Disinfectants and Disinfection Byproduct Rule," "Unregulated Contaminant Monitoring Regulation" (UCMR) and "The Groundwater Rule" require sustained high numbers of sampling of water in the City's distribution system and groundwater Aquifer Storage and Recovery (ASR) wells. ASR groundwater quality testing continues to be performed for ASR Well Nos. 1 and 2, and for FY 07-08 the addition of ASR No. 4, completed in January 2007. ASR Well No. 4 has a pumping capacity of 3 million gallons per day to supply water during high summer demand. The start up of the new ASR No. 4 well will increase the number of required groundwater water quality tests in FY 2007-08. Sampling for potential concentrations of Lead and Copper is required in summer 2007 by Federal and State guidelines.

Pressure reducing valves (PRVs) separate and control Beaverton's many different water pressure zones. With 10 different pressure zones, resulting from a wide range of topographical differences in the City's water service area, a total of 149 larger mainline PRVs will be maintained by the Water Quality field staff in FY 07-08. To continue this trend in drinking water service, the Water Quality group will add PRV stations as needed and continue to automate new and existing stations that are monitored and controlled by a master control computer accessible from numerous PC and laptop computers at remote locations. An upgrade to the main telemetry processor is planned for FY 07-08 to allow expansion of the master computer. The upgraded telemetry processor is needed to accommodate added remote facilities (e.g., PRV stations, on-line water quality analyzers, pumping stations, etc.) that are monitored and controlled by telemetry. The existing processor is reaching the end of its useful life and the new processor will be sized for this eventuality.

A modification and upgrade to the Sexton Mountain Pumping Station is a planned capital improvements project for FY 07-08. The pumping station building and appurtenances will be modified to allow changes in water pumping capacity, pump motor efficiency, in chlorine disinfection of drinking water, and telemetry control and monitoring. Once completed, the pumping station modifications are expected to reduce time currently spent by the Water Quality group in operation and maintenance of the facility.

CITY OF BEAVERTON, OREGON
FISCAL YEAR 2007-08 BUDGET

FUND: 501 WATER	DEPARTMENT: PUBLIC WORKS - ENGINEERING
PROGRAM: 3XXX WATER REPLACEMENT PROJECTS	DEPARTMENT HEAD: DAVID WINSHIP

DRINKING WATER PROGRAM

For a complete narrative of the budget process for Water Construction Projects, refer to pages 62 – 63.

New Water Supply and Joint Water Commission Projects

From 2005 to date, an alternatives analysis examined the various supply options and two were examined in an Environmental Impact Statement. The first alternative is a 40-foot dam raise of Scoggins Dam (at Hagg Lake) with a large diameter raw water pipeline pumpback from the Tualatin River to refill Hagg Lake each year. The second alternative is a multiple source option that includes a 25-foot raise of Scoggins Dam with a large-diameter raw water pipeline pumpback, and expansion of the Willamette River Water Treatment Plant located in Wilsonville.

Construction of a second Joint Water Commission (JWC) water storage reservoir - the Fern Hill Reservoir No. 2, and associated transmission pipeline connections, was substantially completed in 2006. As a JWC partner in the project, the City's share is 25 percent. The JWC Fern Hill Reservoir No. 2 is the second 20-million gallon finished water storage reservoir. The expansion of the JWC water treatment plant serving JWC member agencies (including the City of Beaverton) was completed in 2006. The new improvements are upgrades to a previous treatment plant modifications completed in 1997 to increase the plant production capacity from the former 60 million gallons per day capacity to 75 million gallons per day (MGD) of treated drinking water. The City of Beaverton now owns JWC water treatment plant capacity to supply up to 18.75 MGD of drinking water.

Increased-Capacity Projects

The master plan identified needed increased capacity improvements to provide safe, dependable water service to the City's water customers in conjunction with the build-out of vacant land. The plan recommended improvements in the water distribution system, storage and transmission system, and the water treatment system. Over the last several years the City has allocated considerable funding to Aquifer Storage and Recovery (ASR). ASR Well Nos. 1 and 2 located at the Sorrento Water Works Facility produce approximately 3 million gallons per day or about 9% of the City's total drinking water produced each year. The current estimated single-day summertime peak demand for the City is near 17 million gallons. The completion of ASR Well No. 4 in FY 06-07 has added 3 million gallons per day more in ASR production for a total of 6 MGD. Up to a total of 450 million gallons of treated Joint Water Commission (JWC) water will be piped into the groundwater aquifer for recovery during the peak summer use. These ASR wells act as virtual underground water storage reservoirs to supply water during the summer season. Water supplied by the City's ASR wells will help smooth out the summer's water demand spikes through the 19-mile long transmission mains and from the JWC treatment plant. The City owns a fourth undeveloped ASR well site (future ASR Well No. 3), located in southwest Beaverton. ASR Well No. 3 Pumping Station will likely be constructed within five years. In FY 07/08, the City will also continue study of a future underground storage facility (ASR No. 5). Also, increased capacity distribution system improvements will occur on 1) Franklin Avenue from 2nd to 9th, 2) Allen Blvd. from Hall Blvd. to Lombard Avenue, and 3) Alger Avenue from 5th Street to 9th Street.

Replacement Projects

In 1991 the City identified approximately 162,240 lineal feet of water lines ranging in size from 2 to 18 inches and 2,265 fire hydrants that required replacement over the next 35 years. To date the City has replaced 28,590 lineal feet of the previously identified waterlines that need to be replaced before the end of their useful life. In FY 07-08, waterline replacement projects will occur on 1) Hazel Street from Erickson Ave to Menlo Dr, 2) Menlo Drive from Allen Blvd to 6th St, 3) Colony Court south of 6th Street, and 4) 13th Street from Franklin Avenue to Tucker Street.

City of Beaverton
CIP Financial Plan - Water
FY 07/08 Adopted

Projects	Funding Sources			Total for Fiscal Year
	SDC	Bond Proceeds **	Maint. & Repl.	
Estimated Beginning Balance, 07/01/07	6,205,955	0	0	6,205,955
Estimated addit'l Resources for FY 07/08	800,000		2,448,300	3,248,300
Total Available in FY 07/08	7,005,955	0	2,448,300	9,454,255
Projects, FY 07/08				
3620 Water Extra Capacity Projects				
Franklin Ave. Waterline Imp. (2nd to 12th St.)	450,000			450,000
Allen Blvd. Waterline Ph 2 (Lombard to Hall)	275,000			275,000
Sorrento Pump Sta. Upgrade/Elec. Undergrounding	260,000			260,000
Sexton Mtn. Pump Station Upgrade	195,000			195,000
Alger Ave. Utility Imp. (N. of Allen Blvd.)	170,000			170,000
ASR Well No. 3/ASR No. 5	110,000			110,000
Galena Way Waterline & PRV Station Upgrade	100,000			100,000
Murray Blvd. Extension - Scholls to Barrows	100,000			100,000
Upper Elevation Storage Siting Evaluation, Ph 2	40,000			40,000
Water System Telemetry (annual upgrade project)	35,000			35,000
So. Central "A" Utility Imp. (9th, 12th, 13th, 14th St.)	25,000			25,000
Water Extra-Capacity Projects	20,000			20,000
Rose Biggi Avenue Ext. Waterline LRT to Crescent	5,000			5,000
Program Total - 3620				1,785,000
3635 JWC Capacity projects	145,000			145,000
3636 Scoggins Dam Raise (CWS Project)	76,167			76,167
3638 Fernhill Reservoir No. 2 & Transmission Lines	350,000			350,000
3639 ASR #4	20,000			20,000
3640 Raw Water Pipeline - Scoggins/WTP	65,037			65,037
Maintenance & Replacement (1)				
3611 JWC Projects			878,500	878,500
3700 Annual Water Line Maint. & Replacement Program			60,000	60,000
3701 Water System Improvements			1,425,000	1,425,000
3705 Fire Hydrant Replacement Program			84,800	84,800
Total Project Cost in FY 07/08	2,441,204	0	2,448,300	4,889,504
Estimated Ending Balance @ 6/30/08	4,564,751	0	0	4,564,751

(1) See attached schedule for detail.

Note: Shaded projects are to be completed by city workers, application or installation of materials only.

City of Beaverton
CIP Financial Plan - Water
Maintenance & Replacement Projects Detail
FY 07/08 Adopted

Projects	Project Cost	Total for Fiscal Year
3611 Joint Water Commission Projects		
Water Transmission Pipeline Inspection/Repair	653,000	
WTP Interior Building Improvements	66,250	
Sludge Disposal/Scrubber Media Project	62,500	
Seismic analysis of JWC WTP Structures	62,500	
Water management & Conservation Plan Update	25,500	
Electrical Arc Flash Program	8,750	
Program Total - 3611		878,500
3700 Annual Water Line Maintenance & Replacement Projects		
Water System Hydraulic Modeling, Mapping, etc.	10,000	
Small Works - Misc. Maintenance & Replacement	50,000	
Program Total - 3700		60,000
3701 Water System Improvements		
Sexton Mtn. Pump Station Upgrade	300,000	
Hazel St. - Erickson to Menlo (S. Central "C")	200,000	
Hall Blvd. Waterline Improvements	160,000	
Colony Court Waterline Improvements	140,000	
Progress Ridge PRV/Tigard Interconnect (Barrows)	130,000	
So. Central "A" Utility Imp. (9th, 12th, 13th, 14th St.)	120,000	
Allen Blvd. Waterline Ph 2 (Lombard to Hall)	115,000	
Allen Blvd. Hydrants/Water Svcs. Repl. (Murray to Main)	100,000	
Water System Security Upgrades	85,000	
Small Works - Misc. Maintenance & Repl. Projects	37,000	
Cooper Mtn. 5.5 MG and Sorrento 1 MG Res. Maint.	30,000	
Spinnaker Dr., Windjammer Way/Ct	5,000	
Rollingwood Meter/Fire Vault Improvements	3,000	
Program Total - 3701		1,425,000

Note: Shaded projects are to be completed by city workers, application or installation of materials only.

City of Beaverton
CIP Financial Plan - Water
FY 08/09 Proposed

Projects	Funding Sources			Total for Fiscal Year
	SDC	Bond Proceeds	Maint. & Repl.	
Estimated Beginning Balance, 07/01/08	4,564,751	0	0	4,564,751
Estimated addit'l Resources for FY 08/09	500,000		1,594,000	2,094,000
Total Available in FY 08/09	5,064,751	0	1,594,000	6,658,751
Projects, FY 08/09				
3620 Water Extra Capacity Projects				
Looking Glass Subdiv. Util Imp., Phase 2 (Design)	20,000			20,000
So. Central Area "C" Util. Imp., Phase 1	550,000			550,000
So. Central Area "C" Util. Imp., Phase 2	350,000			350,000
Water Extra Capacity Projects	140,000			140,000
Program Total - 3620				1,060,000
3635 JWC Capacity projects	800,000			800,000
3636 Scoggins Dam Raise (CWS Project)	130,000			130,000
3640 Raw Water Pipeline - Scoggins/WTP	100,000			100,000
Maintenance & Replacement (1)				
3611 JWC Projects			20,000	20,000
3701 Water System Improvements				
Franklin Avenue Waterline			250,000	250,000
Hall Blvd. Waterline Improvement			620,000	620,000
Looking Glass Subdiv. Util. Imp., Ph 1 Construction			504,000	504,000
Looking Glass Subdiv. Util. Imp., Ph 2 Design			30,000	30,000
Royal Woodlands Subdiv. Util. Imp., Design			50,000	50,000
Water System Improvements			100,000	100,000
3705 Fire Hydrant Replacement Program			20,000	20,000
Total Project Cost in FY 08/09	2,090,000	0	1,594,000	3,684,000
Estimated Ending Balance @ 6/30/09	2,974,751	0	0	2,974,751

